CALIFORNIA ENERGY COMMISSION

STAFF DRAFT REPORT

California Investor-Owned Utilities Retail Electricity Price Outlook 2003-2013

Prepared in Support of the Electricity and Natural Gas Report under the Integrated Energy Policy Report Proceeding Docket 02-IEP-01

February 11, 2003 100-03-003SD



Gray Davis, Governor

CALIFORNIA ENERGY COMMISSION

Ruben Tavares *Principal Author*

Al Alvarado

Electricity & Natural Gas Report Project Manager

David Ashuckian

Manager

Electricity Analysis Office

Terry O'Brien

Chief Deputy Director

Systems Assessment

and Facilities Siting Division

Bob Therkelsen

Executive Director

California Investor-Owned Utilities Retail Electricity Price Outlook 2003-2013

Introduction

This Energy Commission staff draft report presents preliminary investor-owned utilities (IOU) electricity retail rate projections for the 2003-2013 period. This is the first of a number of draft reports that the Energy Commission staff are preparing, under the direction of the Ad Hoc Integrated Energy Policy Report Committee, to support the development of the **2003 Integrated Energy Policy Report.**

The Ad Hoc Integrated Energy Policy Report Committee will conduct a workshop on February 25-26, 2003, to receive public comments on this and several other staff draft reports. Public comments will be instrumental towards improving the Commission staff analysis for evaluating California's energy reliability concerns. A Committee Workshop Notice has been posted on the Energy Commission website at: www.energy.ca.gov.

This rate outlook was prepared to serve as a useful baseline for electricity consumers, market participants, regulatory decision-makers and government agencies. For example, the Energy Commission Demand Office uses this outlook as one of the inputs to the electricity demand forecast. Potential investors also use this outlook to evaluate cogeneration and energy efficiency projects. Other agencies determine their future energy budgets using this projection. This outlook is not an absolute prediction of what the future electricity rates will be, since future regulatory actions, technology development, or market changes may alter key fundamental assumptions. The projection uses the best available information and a set of assumptions the author believes probable and realistic. However, many factors influence prices. The purpose of this draft report is to provide consumers, market participants and policy makers with a basic framework for discussion.

The investor-owned utilities covered in this report include:

- Pacific Gas and Electric Company (PG&E)
- Southern California Edison Company (Edison), and
- San Diego Gas & Electric Company (SDG&E).

In this outlook, the staff provides estimates of the retail electricity rates that typical IOU consumers may pay, given projected energy prices, utility plans and programs, regulatory decisions, and staff assumptions. Based on this analysis, the staff concludes that:

1. A substantial rate decrease is highly feasible in 2004 for Edison and PG&E electricity customers. For SDG&E customers, however, the rate decrease should be smaller. Rates

for the three utilities after 2004 would slowly increase to capture the cost of energy and the effect of inflation.

- 2. Major IOU electricity rate component costs, except for the energy surcharges, have been established for the next ten years. Therefore, major cost-based rate fluctuations are unlikely.
- 3. Future retail electricity rates for the IOUs depend to a certain extent on the regulatory decisions of the Federal Energy Regulatory Commission (FERC), State Legislature, the Governor, and the California Public Utilities Commission (CPUC), rather than the spot market prices.

Under current projections, retail rates for all IOU customers will most likely decrease on or before 2004. Anticipating this decrease, Edison submitted an application on January 16, 2003 to the CPUC to decrease rates effective July 2003. However, the CPUC has not yet approved the size, timing, and structure of the rate decrease. PG&E, on the other hand, is still involved in a bankruptcy proceeding, but has been over collecting revenues though energy surcharges to cover energy costs that have not materialized. These surcharges could also end late 2003. SDG&E has also been recovering enough revenues to reduce its AB 265 under collection. Once this is achieved in 2003, SDG&E could implement a small rate decrease in 2004. For the rest of the outlook period, we are estimating a slight increase in IOU rates to keep up with energy costs and inflation. However, additional changes in rates are possible anytime during the outlook period if the market circumstances change, or if FERC orders merchant generators and energy traders to refund substantial amounts to the State utilities for energy overcharges incurred during fall 2000 and winter 2001.

Background

AB 1890 mandated a restructuring of the electricity industry based on the implicit assumption that electricity prices for consumers would eventually decline. Electricity rates did no decline with restructuring, instead they increased. Some expensive rate components of the rates still persist five years after the initiation of restructuring and will continue though the outlook period.

Rates for PG&E and Edison customers were frozen at a 1996 level during the transition period. The rate freeze continued until 2001, except for SDG&E, when the CPUC increased rates by one-cent/kWh in January and an average three-cent/kWh in May. CPUC Decision 01-03-082 authorized the second increase to cover future energy costs. In September of 2001, Edison and the CPUC also negotiated the *Procurement-Related Obligations Account* (PROACT) agreement, which estimated Edison's total procurement-related liability, incurred during the energy crisis, at approximately \$6.4 billion. According to this agreement, Edison had until December 31, 2003 to recover these liabilities using settlement rates or until December 31, 2005 under other alternatives. According to Edison's estimates, bundled customers have been contributing approximately \$250 million per month toward the PROACT balance since September 2001. CPUC Resolution E-3765, issued in January 2002,

set the balance at \$3.6 billion as of September 2001. Edison has estimated PROACT balance at \$686 million as of November 30, 2002.

Electricity Rate Components

IOU retail rates are the prices that consumers pay to electric utilities for electricity used. The IOUs list some of these components in their bills to customers. These rates include the costs for generation of electricity, transmission, distribution, public purpose programs, competition transition charge (CTC), nuclear decommissioning, Department of Water Resources (DWR) bond financing, and other miscellaneous charges.

Method of Estimating Rates

In order to make retail electricity price projections for each utility and customer class, the staff first reviewed current retail rates to establish a benchmark. The staff relied on existing utility tariff books to identify the current rates for different customer classes. The staff then evaluated customer profiles, developed assumptions and inputs, and made projections.

The staff calculated average present rates for each customer class using existing tariff schedules. The staff then projected future rates using adjustments to each component for expected changes in CPUC authorized costs of service. These adjustments apply to generation and non-generation costs.

Table 1 lists staff's energy assumptions for a typical utility customer. The table provides monthly average electricity consumption, load factor and demand for each customer type. Actual electricity characteristics of specific customers depend on many factors such as, climate and type of facility, type of energy using equipment, and others. These assumptions may not exactly match IOU definitions of typical customers.

Table 1 IOU Typical Customer Monthly Characteristics

	Residential	Small Commercial	Medium Commercial	Industrial	Agricultural
Usage kWh	500	1,241	21,862	735,305	5,093
Load Factor	NA	.47	.50	.83	.35
Demand kW	NA	3.6	60	1217	20

NA: Not Applicable

Sources: Various IOU tariff schedules and websites.

Table 2 provides the rate schedules used by staff to represent five customer classes. IOUs usually divide their customers into residential, commercial, industrial, agricultural, streetlighting and other customer classes. Most customer classes contain several rate schedules. Utilities assign customers with similar consumption characteristics to a specified rate schedule. Some rate schedules have more customers than others. Staff used these rate schedules because they reflect the most common characteristics of a customer class.

Table 2
IOU Rate Schedules Representing Customer Classes

Utility	Residential	Small Commercial	Medium Commercial	Industrial	Agricultural
PG&E	E-1	A-1	A-10	E-20P	AG-1 (B)
SCE	D	GS-1	GS-2	TOU-8	PA-1
SDG&E	DR	Α	AL-TOU	A6-TOU	PA

Source: Various IOU tariff schedules and utility websites.

Generation Cost

Staff used generation rates currently in tariffs as a benchmark to estimate generation costs and energy surcharges. Staff then projected the costs of four generation components: 1) Utility retained generation (URG); 2) DWR power purchased costs; 3) Renewable portfolio standard (RPS) costs; and 4) Spot market purchases. The staff first estimated quantities of electricity from each source, then projected the cost of that electricity. The result of these four components established the forecast of generation cost for the IOUs. Our methodology also reflected oversubscribed DWR contract purchases as negative spot market purchases. In essence, staff assumed that IOUs, on behalf of DWR, would sell excess generation on the spot market. Changes in generation cost were allocated to different customer classes using existing allocation methodology approved by the CPUC in D 01-03-082.

Staff derived URG hydro, nuclear and contracts generation costs and volumes from DWR and CPUC public documents. Staff modified these costs over the forecast period using inflation and projected cost of natural gas. For example, qualifying facility (QF) costs were split into fixed and variable components. Variable QF costs were adjusted over the forecast period for increases in the cost of natural gas.

Staff also reviewed DWR contract provisions to estimate fixed and variable energy costs and amounts over the duration of the contracts. To estimate future RPS quantities and costs for each utility, staff relied on public documents and data submitted to the CPUC under the current RPS proceeding. Once these costs and amounts were estimated, staff used the MultisymTM model and its own assumptions and inputs to project spot market prices and net short purchases.

Although the fate of the PROACT agreement is still in litigation at the State Supreme Court, staff has assumed that Edison will be allowed to use the funds the utility has already collected as specified in the PROACT agreement. Staff has also assumed that PG&E will be allowed to use its surplus from energy surcharges for debt recovery. Once Edison and PG&E finish collecting their debt by the end of 2003, rates for both utilities should drop by the amount of the surcharges.

Non-Generation Costs

Staff assumed that non-generation costs such as transmission, distribution and nuclear decommissioning currently in tariffs would remain constant through 2003 and increase with inflation during the rest of the outlook period. The staff is aware that the IOUs have filed general rate case applications with the CPUC to change some of these costs. However, the CPUC has not acted on them at this time.

The trust transfer amount (TTA) charge represents the cost of financing bonds needed to fund the ten percent rate reduction that residential and small commercial customers received during the rate freeze period. Residential and small commercial customers have the obligation to pay this charge to redeem the bonds. The charge would remain in these customers' bills through the year 2007. However, staff assumed that the ten percent rate reduction will expire beginning 2004.

Current law (AB 995 and SB 1194) provides authority through the year 2012 for the collection of a non-bypassable system benefits charge to fund public purpose programs primarily dedicated to research development and demonstration, renewable energy resources and energy efficiency, and California Alternative Rates for Energy (CARE). This charge is currently included in the rates. Staff assumed that these programs would continue through the outlook period.

The CPUC authorized the IOUs to charge approximately 0.5 cents/kWh to redeem the bonds that the State of California issued to cover monies borrowed from the general fund to

purchase energy on behalf of the IOUs during the energy crisis. These charges are included in the staff rate projections, as indicated in the **Appendix**, **Tables 1A-5C**.

Rate Outlook 2003-2013

A comparison of the utility average electricity rates in **Tables 3-7** and **Appendix Tables 1A-5C** indicate a sizeable decrease for Edison and PG&E customers between 2003 and 2004 and smaller decrease for SDG&E customers. The main reason for this decrease is staff assumption that the IOUs will stop collecting surcharges to cover debt and under collections incurred during the crisis.

Since surcharges do not apply to residential customers in the first two tiers and the ten percent rate reduction authorized at the beginning of restructuring is not expected to continue in 2004, staff projects a decrease in average rates for PG&E and Edison customers of approximately ten percent. For SDG&E customers the projection is five percent. Thereafter, rates increase gradually for IOU customers to cover costs of inflation and energy. However, the expiration of TTA charges in 2008 shows another six percent rate decrease for all IOUs, as indicated in **Table 3**.

Table 3
IOU Residential Retail Electricity Price Outlook

	(No	ominal ce	ents/kWh)	<u> </u>
Year	PG&È	Edison	SDG&E	2001 GDP
				Deflator
2003	12.3	13.0	13.9	102.8
2004	11.0	11.9	13.2	106.6
2005	11.1	11.8	13.3	110.4
2006	11.2	11.9	13.3	114.3
2007	11.3	12.0	13.4	116.9
2008	10.6	11.3	12.3	119.2
2009	10.7	11.4	12.5	121.4
2010	10.7	11.6	12.7	123.7
2011	10.8	11.6	12.7	126.0
2012	10.9	11.4	12.5	128.6
2013	11.3	11.9	13.0	131.3
	Source:	Energy C	ommissior	n Staff

Table 4 indicates staff's projections for small commercial customers though the outlook period. PG&E and Edison customers would receive up to a three-cent/kWh rate decrease in 2004, a 15 to 17 percent drop. As with residential customers, staff expects the ten percent rate reduction approved by the State Legislature at the beginning of restructuring to expire in

2004. Staff rate projections for small commercial customers show a decrease in 2004, an increase through 2007 to account for energy costs and inflation, a decrease by approximately five percent in late 2008 due to the expiration of TTA charges, and finally an increase through the rest of the outlook period to reflect inflation and projected energy cost.

Table 4
IOU Small Commercial Retail Electricity Price Outlook

	(N	ominal co	ents/kWh)
Year	PG&E	Edison	SDG&E	2001 GDP
				Deflator
2003	19.0	17.7	16.0	102.8
2004	15.7	15.1	15.3	106.6
2005	16.0	14.7	15.4	110.4
2006	16.0	14.8	15.3	114.3
2007	16.2	15.0	15.4	116.9
2008	15.7	14.3	14.2	119.2
2009	16.0	14.5	14.4	121.4
2010	15.8	14.7	14.6	123.7
2011	16.0	14.6	14.6	126.0
2012	16.1	14.3	14.3	128.6
2013	16.8	14.9	14.9	131.3
	Source:	Energy C	ommissio	n Staff

Table 5 shows staff's projections for medium commercial customers. Electricity rates for these customers indicate a large drop in rates in 2004 due the drop of energy surcharges. Rates for PG&E and Edison customers are projected to decrease 3.5 cents/kWh, a drop of 23 to 24 percent. For SDG&E customers the decrease is less than ten percent. Rates after 2004 would increase gradually through the outlook period.

7

Table 5
IOU Medium Commercial Retail Electricity Price Outlook

	(N	ominal c	ents/kWh)
Year	PG&E	Edison	SDG&E	2001 GDP Deflator
2003	13.8	15.0	12.8	102.8
2004	10.6	11.4	11.0	106.6
2005	10.7	11.0	12.2	110.4
2006	10.6	11.2	12.2	114.3
2007	10.7	11.4	12.4	116.9
2008	10.1	11.5	12.1	119.2
2009	10.2	11.6	12.2	121.4
2010	10.0	11.8	12.4	123.7
2011	10.1	11.7	12.4	126.0
2012	10.2	11.3	12.1	128.6
2013	10.6	11.8	12.6	131.3
	Source:	Energy C	Commissio	n Staff

Table 6 indicates rate projections for industrial customers. PG&E and Edison customers would receive up to a four-cent/kWh rate decrease in 2004, a 30 percent rate drop. For SDG&E customers the decrease would be in the six percent range.

Table 6
IOU Industrial Retail Electricity Price Outlook

	(N	ominal co	ents/kWh)	
Year	PG&E	Edison	SDG&E	2001 GDP	
			Deflato		
2003	12.0	11.8	11.4	102.8	
2004	7.9	8.5	10.5	106.6	
2005	7.9	8.0	10.5	110.4	
2006	7.8	8.1	10.4	114.3	
2007	8.0	8.3	10.5	116.9	
2008	8.1	8.3	10.2	119.2	
2009	8.2	8.4	10.3	121.4	
2010	7.9	8.5	10.5	123.7	
2011	8.0	8.4	10.5	126.0	
2012	8.0	8.0	10.1	128.6	
2013	8.3	8.4	10.5	131.3	
	Source:	Energy C	ommissio	n Staff	

Table 7 indicates staff's rate projections for agricultural customers. Rates for PG&E agricultural customers are currently up to 20 cents/kWh. A drop in energy surcharges would decrease rates by approximately five cents/kWh. Although rates for Edison and SDG&E are lower than PG&E rates, a decrease of up to 20 and 10 percent for Edison and SDG&E customers respectively is feasible in 2004.

Table 7
IOU Agricultural Retail Electricity Price Outlook

	(N	ominal co	ents/kWh)
Year	PG&E	Edison	SDG&E	2001 GDP
				Deflator
2003	19.3	13.1	14.7	102.8
2004	14.3	10.2	14.1	106.6
2005	14.5	9.9	14.3	110.4
2006	14.6	10.1	14.3	114.3
2007	14.8	10.3	14.5	116.9
2008	15.1	10.4	14.3	119.2
2009	15.3	10.5	14.4	121.4
2010	15.1	10.6	14.7	123.7
2011	15.3	10.5	14.7	126.0
2012	15.4	10.3	14.4	128.6
2013	16.0	10.7	15.0	131.3
	Source:	Energy C	ommissio	n Staff

The **Appendix, Tables 1A-5C** show Energy Commission staff projections of each rate component though 2013. As indicated above, staff assumed that the CPUC would keep existing methodology and rate structures to allocate revenues to customers throughout the 2003-2013 outlook period.

APPENDIX

Table 1A
PG&E Residential Electricity Rate Components
Outlook 2003 – 2013
Nominal Cents/kWh

PG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.50	0.54	0.56	0.57	0.59	0.60	0.61	0.62	0.63	0.65	0.67
Distribution	4.02	4.29	4.44	4.59	4.70	4.79	4.88	4.97	5.07	5.17	5.39
Public Purpose Programs	0.43	0.43	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44
Nuclear Decommissioning	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06
TTA	1.12	1.05	0.98	0.92	0.86						
Reliability	0.45	0.47	0.49	0.50	0.52	0.53	0.54	0.55	0.56	0.57	0.59
Non Gen Total	6.58	6.83	6.95	7.08	7.15	6.41	6.52	6.64	6.76	6.89	7.16
Generation	5.43	3.66	3.67	3.59	3.65	3.72	3.76	3.58	3.61	3.58	3.75
10% Rate reduction	-1.22										
Energy Surcharges	1.49										
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Generation+Surcharges	6.92	4.17	4.16	4.06	4.13	4.18	4.21	4.02	4.03	4.00	4.16
Total Rate	12.28	11.00	11.12	11.15	11.28	10.59	10.73	10.66	10.79	10.88	11.32
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 1B
Edison Residential Electricity Rate Components
Outlook 2003 – 2013
Nominal Cents/kWh

Edison	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.40	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.53
Distribution	3.75	4.00	4.14	4.28	4.38	4.47	4.55	4.63	4.72	4.82	5.03
Nuclear Decommissioning	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Public Purpose Programs	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
TRBAA	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
PURCF	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
TTA	1.13	1.06	0.99	0.92	0.85						
Basic Charge (\$kWh)	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.24	0.25	0.25	0.27
Non Gen Total	5.85	6.06	6.16	6.25	6.30	5.55	5.65	5.75	5.86	5.97	6.21
Generation	8.47	5.45	5.09	5.15	5.24	5.30	5.34	5.41	5.31	5.01	5.25
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
10% Rate reduction	-1.28										
Total Rate	13.04	11.93	11.76	11.90	12.02	11.32	11.45	11.62	11.61	11.40	11.87
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 1C SDG&E Residential Electricity Rate Components Outlook 2003 – 2013 Nominal Cents/kWh

SDG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.63	0.67	0.70	0.72	0.74	0.75	0.77	0.78	0.80	0.81	0.85
Distribution	4.24	4.52	4.69	4.85	4.96	5.06	5.15	5.25	5.35	5.46	5.69
Nuclear Decommissioning	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Public Purpose Programs	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.36	0.36
TTA	1.24	1.15	1.07	1.00	0.92						
Restructure	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11
Non Gen Total	6.62	6.85	6.97	7.09	7.15	6.34	6.45	6.56	6.68	6.81	7.09
Generation	6.53	5.15	5.12	4.97	5.03	4.74	4.77	4.89	4.83	4.47	4.72
CTC	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
RMR	0.37	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.49
Gen+CTC+RMR	7.24	5.88	5.85	5.71	5.79	5.51	5.54	5.67	5.62	5.27	5.54
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	13.85	13.24	13.31	13.28	13.41	12.30	12.45	12.67	12.73	12.50	13.03
1 0 001 1 1010	10.00		10101	10.20						12.00	10100
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 2A
PG&E Small Commercial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

PG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.70	0.75	0.78	0.80	0.82	0.84	0.85	0.87	0.88	0.90	0.94
Distribution	5.95	6.34	6.57	6.79	6.95	7.09	7.22	7.35	7.50	7.65	7.97
Public Purpose Programs	0.38	0.38	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39
Nuclear Decommissioning	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08
TTA	1.00	0.94	0.88	0.82	0.76						
Reliability	0.28	0.29	0.30	0.31	0.32	0.32	0.33	0.33	0.34	0.35	0.36
Non Gen Total	8.36	8.76	8.96	9.17	9.30	8.70	8.85	9.01	9.18	9.36	9.74
Generation	6.87	6.54	6.56	6.41	6.53	6.65	6.71	6.40	6.44	6.40	6.70
Energy Surcharges	5.49										
10% Rate Reduction	-1.57										
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Generation+Surcharges	12.36	7.05	7.05	6.88	7.00	7.11	7.16	6.84	6.87	6.81	7.11
Total Rate	19.16	15.81	16.02	16.06	16.30	15.80	16.02	15.85	16.04	16.17	16.85
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 2B
Edison Small Commercial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

Edison	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.44	0.47	0.49	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.60
Distribution	4.10	4.38	4.53	4.69	4.80	4.89	4.98	5.08	5.17	5.28	5.50
Nuclear Decommissioning	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09
Public Purpose Programs	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.37	0.37
TRBAA	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
TTA	1.20	1.12	1.05	0.97	0.90						
PUCRF	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Non Gen Total	6.13	6.36	6.46	6.56	6.61	5.82	5.92	6.03	6.14	6.26	6.51
Generation	12.82	8.25	7.71	7.80	7.93	8.01	8.08	8.19	8.04	7.58	7.94
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
10% Rate Reduction	-1.25										
Total Rate	17.70	15.12	14.66	14.84	15.02	14.29	14.46	14.66	14.60	14.25	14.86
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 2C
SDG&E Small Commercial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

SDG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.67	0.72	0.74	0.77	0.78	0.80	0.81	0.83	0.85	0.86	0.90
Distribution	4.19	4.47	4.63	4.79	4.90	4.99	5.09	5.18	5.28	5.39	5.62
Nuclear Decommissioning	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Public Purpose Programs	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
TTA	1.31	1.21	1.13	1.05	0.97						
Restructuring	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11
Non Gen Total	6.69	6.92	7.03	7.15	7.20	6.34	6.45	6.56	6.68	6.81	7.09
CTC	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
RMR	0.42	0.44	0.45	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.55
Energy	8.01	6.60	6.56	6.36	6.45	6.07	6.11	6.26	6.19	5.73	6.04
Generation+CTC+RMR+En	9.27	7.87	7.84	7.66	7.76	7.40	7.44	7.60	7.54	7.09	7.43
ergy											
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	15.96	15.30	15.36	15.28	15.43	14.19	14.34	14.60	14.64	14.32	14.92
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 3A
PG&E Medium Commercial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

PG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.44	0.47	0.48	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.59
Distribution	2.25	2.40	2.49	2.57	2.63	2.68	2.73	2.78	2.84	2.90	3.02
Public Purpose Programs	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
FTA	1.00	0.94	0.88	0.82	0.76						
Nuclear Decommissioning	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Reliability	0.39	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.48	0.49	0.52
Total Non-generation	4.50	4.64	4.70	4.76	4.78	4.09	4.16	4.23	4.31	4.39	4.56
Generation	4.88	5.47	5.49	5.36	5.46	5.56	5.61	5.35	5.39	5.35	5.61
surcharges	5.47										
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Generation +surcharges	10.34	5.98	5.98	5.84	5.93	6.02	6.07	5.79	5.81	5.77	6.01
10 percent reduction	-1.02										
Total Rate	13.82	10.62	10.67	10.59	10.71	10.11	10.23	10.02	10.12	10.15	10.57
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 3B
Edison Medium Commercial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

Edison	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.32	0.35	0.36	0.37	0.38	0.39	0.39	0.40	0.41	0.42	0.43
Distribution	2.40	2.56	2.65	2.74	2.81	2.86	2.91	2.97	3.03	3.09	3.22
Nuclear Decommissioning	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Public Purpose Programs	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30
TRBAA	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
PUCRF	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Non-generation	3.02	3.20	3.31	3.42	3.49	3.55	3.62	3.68	3.75	3.82	3.97
Generation	12.02	7.74	7.23	7.31	7.43	7.51	7.57	7.68	7.53	7.10	7.44
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	15.04	11.45	11.03	11.20	11.39	11.52	11.64	11.79	11.70	11.33	11.82
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 3C
SDG&E Medium Commercial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

SDG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.64	0.68	0.70	0.73	0.74	0.76	0.77	0.79	0.80	0.82	0.85
Distribution	2.82	3.01	3.12	3.23	3.30	3.36	3.43	3.49	3.56	3.63	3.79
Nuclear Decommissioning	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Public Purpose Programs	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31
Restructuring Implementation	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09
Total Non-generation	3.90	4.13	4.27	4.41	4.50	4.58	4.66	4.74	4.83	4.92	5.12
Energy	7.88	6.45	6.41	6.22	6.30	5.94	5.97	6.12	6.05	5.60	5.91
CTC	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
RMR	0.40	0.41	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.52
Energy+CTC+RMR	9.06	7.65	7.62	7.44	7.54	7.18	7.23	7.38	7.32	6.88	7.21
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	12.95	12.29	12.38	12.33	12.51	12.22	12.34	12.56	12.57	12.22	12.74
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 4A
PG&E Industrial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

PG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.31	0.33	0.34	0.35	0.36	0.36	0.37	0.38	0.39	0.40	0.41
Distribution	0.99	1.06	1.10	1.14	1.16	1.18	1.21	1.23	1.25	1.28	1.33
Public Purpose Programs	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Nuclear Decommissioning	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Reliability	0.28	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.34	0.35	0.36
Total Non-generation	1.91	2.00	2.07	2.13	2.17	2.21	2.24	2.28	2.32	2.36	2.45
Generation	5.02	5.33	5.35	5.22	5.32	5.42	5.47	5.22	5.25	5.21	5.46
Energy Surcharges	5.06										
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Generation+Surcharges	10.07	5.84	5.84	5.70	5.79	5.88	5.92	5.66	5.67	5.63	5.87
Total Rate	11.98	7.84	7.90	7.83	7.96	8.08	8.17	7.94	7.99	7.99	8.32
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 4B
Edison Industrial Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

Edison	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.22	0.24	0.25	0.26	0.26	0.27	0.27	0.28	0.28	0.29	0.29
Distribution	0.63	0.67	0.69	0.72	0.73	0.75	0.76	0.77	0.79	0.81	0.84
Nuclear Decommissioning	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Public Purpose Programs	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
TRBAA	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
PUCRF	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Non-generation	0.99	1.04	1.08	1.11	1.14	1.16	1.18	1.20	1.22	1.24	1.29
Generation	10.77	6.93	6.48	6.55	6.66	6.73	6.79	6.88	6.75	6.36	6.67
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	11.76	8.48	8.05	8.14	8.27	8.34	8.42	8.52	8.39	8.02	8.37
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 4C SDG&E Industrial Electricity Rate Components Outlook 2003-2013 Nominal Cents/kWh

SDG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.66	0.71	0.73	0.76	0.78	0.79	0.81	0.82	0.84	0.85	0.89
Distribution	1.47	1.56	1.62	1.68	1.72	1.75	1.78	1.81	1.85	1.89	1.97
Nuclear Decommissioning	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Public Purpose Programs	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Restructuring	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09
Total Non-generation	2.57	2.72	2.80	2.89	2.95	3.00	3.05	3.10	3.16	3.22	3.34
Energy	7.88	6.28	6.23	6.05	6.13	5.78	5.81	5.95	5.88	5.45	5.75
CTC	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
RMR	0.33	0.35	0.36	0.37	0.38	0.39	0.40	0.40	0.41	0.42	0.44
Energy+RMR+CTC	8.81	7.22	7.19	7.02	7.11	6.76	6.80	6.95	6.89	6.46	6.78
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	11.38	10.45	10.48	10.38	10.53	10.22	10.31	10.50	10.47	10.10	10.53
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 5A
PG&E Agricultural Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

PG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.40	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.54
Distribution	5.16	5.50	5.70	5.89	6.03	6.15	6.26	6.38	6.50	6.64	6.92
Public Purpose Programs	0.65	0.65	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Nuclear Decommissioning	80.0	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11
Reliability	0.36	0.37	0.39	0.40	0.41	0.42	0.43	0.43	0.44	0.45	0.47
Total Non-generation	6.66	7.04	7.27	7.50	7.66	7.80	7.93	8.07	8.21	8.37	8.69
Generation	8.36	6.71	6.72	6.57	6.69	6.82	6.88	6.56	6.60	6.56	6.87
Energy surcharges	4.31										
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Generation+Surcharges	12.67	7.21	7.21	7.04	7.16	7.27	7.33	7.00	7.03	6.97	7.28
Total Rate	19.33	14.26	14.49	14.55	14.82	15.07	15.26	15.07	15.24	15.34	15.97
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 5B
Edison Agricultural Electricity Rate Components
Outlook 2003-2013
Nominal Cents/kWh

Edison	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.13	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18
Distribution	2.63	2.80	2.91	3.01	3.07	3.14	3.19	3.25	3.32	3.38	3.53
Nuclear Decommissioning	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Public Purpose Programs	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
TRBAA	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07
PUCRF	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Non-generation	3.12	3.30	3.41	3.52	3.60	3.66	3.73	3.79	3.86	3.93	4.09
Generation	10.00	6.43	6.01	6.08	6.18	6.25	6.30	6.39	6.27	5.91	6.19
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	13.11	10.25	9.92	10.08	10.25	10.36	10.48	10.61	10.55	10.25	10.68
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34

Table 5C SDG&E Agricultural Electricity Rate Components Outlook 2003-2013 Nominal Cents/kWh

SDG&E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transmission	0.72	0.76	0.79	0.82	0.84	0.85	0.87	0.89	0.90	0.92	0.96
Distribution	4.45	4.75	4.92	5.09	5.20	5.31	5.41	5.51	5.61	5.73	5.97
Nuclear Decommissioning	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Public Purpose Programs	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Restructuring	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.12
Total Non-generation	5.62	5.97	6.17	6.37	6.51	6.63	6.74	6.86	6.99	7.12	7.41
Energy Cost	7.90	6.46	6.41	6.22	6.31	5.94	5.98	6.12	6.05	5.60	5.91
CTC	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
RMR	0.45	0.47	0.48	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.59
Total Generation	9.07	7.64	7.61	7.44	7.54	7.18	7.23	7.38	7.32	6.88	7.22
DWR Bond surcharge	0.42	0.51	0.49	0.48	0.47	0.45	0.45	0.44	0.42	0.41	0.41
Total Rate	14.69	14.12	14.27	14.28	14.51	14.26	14.42	14.68	14.73	14.42	15.03
2001 GDP Deflator	1.03	1.07	1.10	1.14	1.17	1.19	1.21	1.24	1.26	1.29	1.34